

State of Alaska  
Department of Fish and Game  
Public Review Nomination for Waters  
Important to Anadromous Species

ALASKA DEPT. OF  
FISH & GAME

DEC 15 1982

82-137

HABITAT  
REGIONAL OFFICE

☒ Addition

☐ Deletion

Name of Waterbody (if known): Vanderbilt Creek

Location:

Anadromous Waters Catalog Volume and Number Southeastern Region 1  
USGS 1:63,360 Quadrangle Juneau B-2, Sec 5, T4S, R 67 E - Copper River Meridian  
or 1:250,000 (if 1:63,360 not available) (See map)

Species	Date(s) Observed	Stage(s) (Spawning, Rearing, Migration)
DV, CO	8/21/70	Rearing
"Young salmonids" CO or DV	Summer, 1978	"
"Young salmonids" + spawned-out CO	October, 1978	" spawning
CO adults	11/8/78	"

See reference  
①, attached  
See reference  
②, attached  
See reference  
③, attached

Comments: Please provide any clarifying information in addition to identification on Anadromous Waters Catalog Public Review Maps.

Listed as 111-40-012 in former catalogue editions, but deleted from April, 1982, revision.

Name of person requesting correction: Marilyn Sigman

Date: 12/13/82

Signature: Marilyn Sigman  
Area Habitat Biologist, Juneau

PKW 12/17/82

Added 12/20/82 - [unclear]

REED

HABITAT REGIONAL OFFICE COPY  
DO NOT REMOVE

# **alaska department of fish & game**

FEDERAL AID IN FISH RESTORATION PROJECT

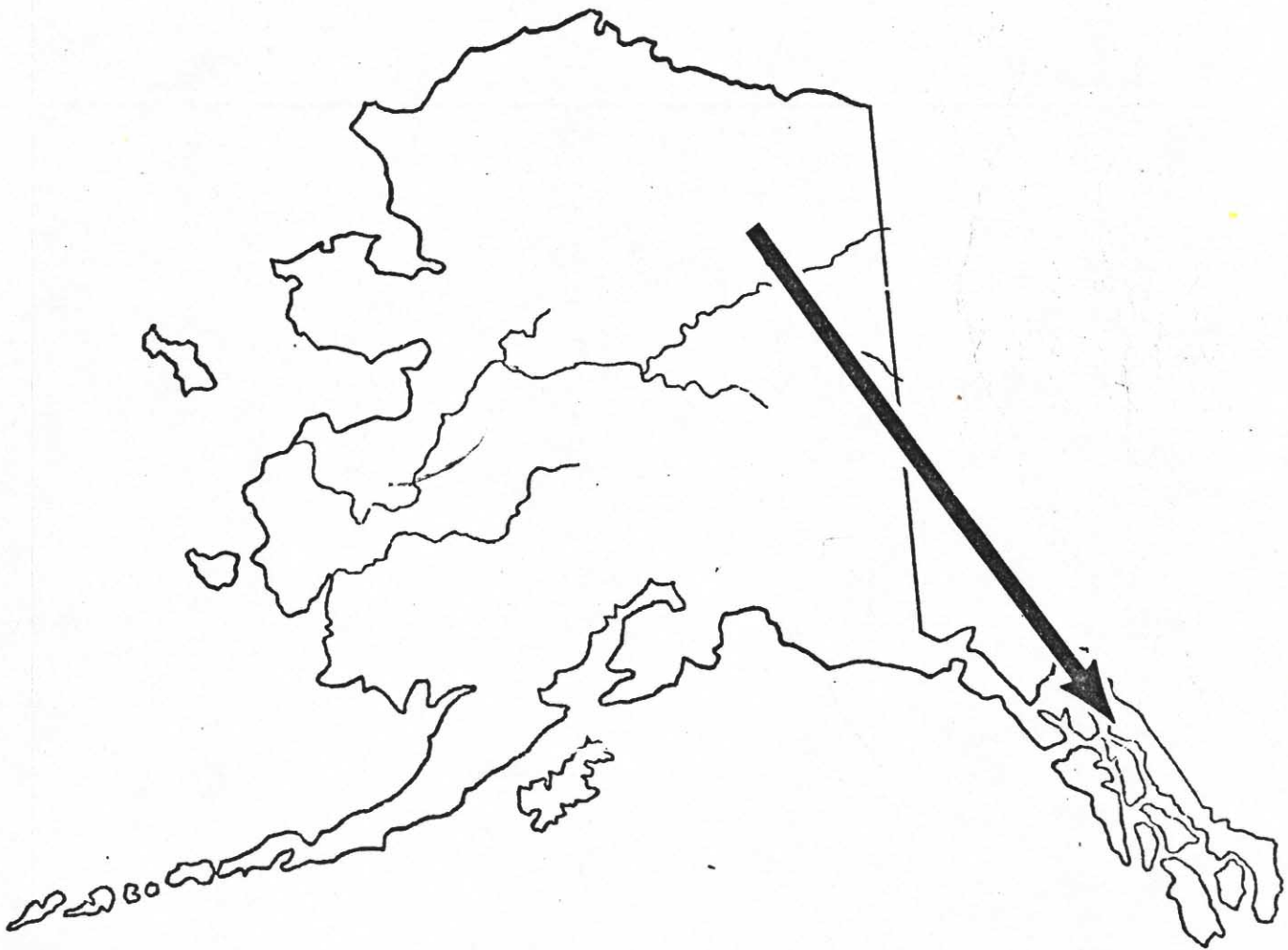
DIVISION OF SPORT FISH

Ref. ①

JOB R-IV-C

DOLLY VARDEN SPORT FISHERY -  
JUNEAU AREA.

Richard D. Reed and  
Robert H. Armstrong



Project F-9-3

Fish Observed:

<u>Dolly Varden</u>		<u>Coho</u>		<u>Unknown</u>	
<u>Fry</u>	<u>Fingerling</u>	<u>Fry</u>	<u>Fingerling</u>	<u>Fry</u>	<u>Fingerling</u>
38	0	78	2	213	0

Viewing conditions were poor due to the dark brown color of water.

Average Catch/Trap (n=6): Dolly Varden = 9.2, coho = 7.8, cutthroat = 0.2

Evaluation: The overall rearing potential for this creek is excellent. The slow current, added to the numerous undercut banks and logs, creates excellent rearing conditions throughout the length of the stream for both Dolly Varden and coho.

Spawning Areas:

Salmon Counts:

<u>Date</u>	<u>Fish Observed</u>	
1963	100 red	(Bucaria, 1968)
1964	17 red	(Bucaria, 1968)

Evaluation: There is fair spawning in the lower reaches of the creek for red salmon (Bucaria, 1968). The entire length of the surveyed stream could probably be utilized by Dolly Varden and coho, as there is good spawning gravel throughout.

Planting History: None known

Fishing History: Unknown

References: Anonymous, 1952b (Description)  
Bailey, 1971 (Salmon info.)  
Bucaria, 1968 (Location, salmon counts)

12  
Unnamed (111-40-42)  
(Vanderbilt Creek)

Survey Date: 8/21/70

Location: Lat. 58°20'43" Long. 134°29'48" (5 miles NW of Juneau)

Description: This creek flows around the north side of Vanderbilt Hill and empties into Gastineau Channel. The stream meanders through a grass covered intertidal flatlands for about 1/8 mile. The Glacier Highway crosses just above the high tide mark. A tributary crossing



under the highway is subjected to possible pollution discharge from the motel and church located on both banks. The main stream continues on for about 1/4 mile, becoming progressively smaller, until it finally becomes braided and terminates in a marshy area. A second tributary enters at about 3/8 mile upstream. This tributary is very small and insignificant. Accessibility up the stream is good; however, private land borders the lower sections. The stream derived its name from John W. Vanderbilt who lived in the vicinity and was a watchman for one of the mining claims on Lemon Creek (Orth, 1967).

Barriers: None

Species Present: Dolly Varden, coho salmon.

Rearing Habitat:

Number of Areas: Most of the stream surveyed would make good rearing areas.

Fish Observed:

<u>Dolly Varden</u>		<u>Coho</u>		<u>Unknown</u>	
<u>Fry</u>	<u>Fingerling</u>	<u>Fry</u>	<u>Fingerling</u>	<u>Fry</u>	<u>Fingerling</u>
3	0	0	0	10	10

Average Catch/Trap (n=4): Dolly Varden = 1.75, coho = 5.50

Evaluation: The entire length of the stream offers rearing area. Numerous undercut banks and slow current areas offers rearing areas for coho and Dolly Varden.

Spawning Areas:

Salmon Counts: None available.

Evaluation: Fair spawning areas are present in the intertidal areas. The areas are limited in the main stream above the bridge.

Planting History: None known

Fishing History: Unknown

References: McConaghy, 1969 (Hydrologic data)  
Orth, 1967 (Information on Vanderbilt Hill)

Wadleigh Creek (111-50-37)  
(Waydelich Creek)

Survey Date: 7/21/70

November 4, 1978

CHANNEL ALTERATION - MARK 'N PAK CENTER

- I. The objective of this work is to provide an evaluation and a design for possible relocation of about four hundred feet of Vanderbilt Creek in front of Mark 'n Pak Center, with minimal environmental impact. The owner-operators of Mark 'n Pak want to enlarge the useful parking area of their center. The design provided satisfies the above objective and provides a stable settlement of this stream margin and the related property.
- II. The present condition of Vanderbilt Creek in the reach under consideration is shown in the attached air photo plate and in the over-lays for topography and channel characteristics. The primary stream channel, swinging closest to the Shopping Center, is approximately 390 feet from the upstream highway bridge to the lower bridge crossing the Creek and entering the parking area. Within this distance the stream falls approximately 1.2 feet for an average gradient of .0031. The partial channel, nearest to the highway, appears to be an uncompleted man-made route. This route, between bridges, is nearly 350 feet long, giving it a gradient of .0034. This partial channel presently carries flood waters in spite of the natural obstructions to flow at its lower end. Stream bottom conditions in the two channels are described on overlay B, and are summarized in Table 1. Present stream bed surface composition varies from one to three inches diameter gravel in faster-flow sections to sand-silt in deeper, slower-flowing sections. Larger six to eight inch diameter cobbles are dispersed through the area, and unlike the sand, silt, and gravel, are not material transported in as part of the stream's bedload.



In areas where higher stream flows pass over or around marginal wetlands or other obstructions, slowing flows and producing deposition, a black, foul-smelling ooze can frequently be found. Sediment from the bare-soil highway roadside is being carried into adjacent stream areas during periods of rainstorm. Three drains from the Shopping Center parking lot discharge adjacent to the present main channel. These discharges do not show much evidence of streamside erosion.

In summer, 1978, young salmoids were seen in the studied reach. (Less than 3 inches long). They were not positively identified, and are presumed to have been Coho or possibly Dolly Varden. In October, 1978, salmonoid young were again sighted, as were two spawned-out adult Coho.

An estimate of rearing area presently contained within the stream reach in question was made from the aerial photograph (see Table 2). This estimate yielded a total of approximately 4,000 ft.<sup>2</sup>.

- III. The recommended channel alteration and related streamside handling is shown on overlay C. This 350 foot channel will follow near the path of the present partial channel, but will swing gently toward the shopping center. The channel will initially be formed at about eight feet, with natural stream cutting allowed to increase the width up to two feet on either side. Installed grade of stream bed will be generally uniform but a two-log obstruction will be placed in the channel about midway through the reach. This flow obstruction will favor stream digging and maintenance of a pool in the channel.

The highway roadside surface and all other bare-soil areas over the stream reach will be hand-dressed to reasonable smoothness, then fertilized and seeded with a grass mixture. (See attached appendix material.)

1978 Fish Creek Facility Escapement Surveys<sup>1</sup> (Coho)

ADFC  
Rel. ③

Stream Name	Stream #	Stream Live Adult	Stream Live Jack	Stream Dead Adult	Stream Dead Jack	Total	Marked <sup>2</sup>	Marked	Peak Survey Date
<del>111-50-69</del>	111-50-69	39	5	--	--	44	15	34.1	10/16
Outer Pt. Cr.	111-50-75	13	7	2	--	22	5	22.7	10/27
Johnson Cr.	111-50-65	51	11	2	--	64	10	15.6	10/23
Love Cr.	111-50-71	1	2	--	--	3	2	66.7	10/9
"A" Cr. <i>W. Day</i>	111-50-	9	8	--	--	17	8	47.1	10/19
"B" Cr. <i>W. Day</i>	111-50-	--	--	--	--	--	--	--	10/9-11/9
Ninemile Cr.	111-50-67	--	--	--	--	--	--	--	10/3-10/11
Hilda Cr.	111-40-70	--	--	--	--	--	--	--	11/7*
Navies Cr.	115-10-63	--	--	--	--	--	--	--	11/2*
Windfall Cr.	111-50-06	34	2	11	--	47	--	0	11/12*
Peterson Cr.	111-50-10	34	2	4	--	40	2	5.0	10/26
May Cr.	111-50-37	--	--	--	--	--	--	--	10/2-11/2
Montana Cr.	111-50-52	3	--	--	--	3	--	0	11/3
McGinnis Cr.	111-50-52	3	--	1	--	4	--	0	11/3
Steep Cr.	111-40-28	39	1	1	--	41	--	0	11/3
<del>111-50-60</del>	111-50-60	2	--	--	--	--	--	--	10/15
<del>111-50-62</del>	111-50-62	83	1	4	--	88	--	0	10/31
"D" Cr. <i>Switzer ch. 2/2/81</i>	111-50-	--	--	--	--	--	--	--	11/2*
<del>111-40-07</del>	111-40-07	149	26	19	--	194	5	2.6	10/24
<del>111-50-10</del>	111-50-10	4	--	--	--	4	1	25.0	10/16*
<del>111-50-12</del>	111-50-12	4	--	--	--	4	--	0	11/8
<del>111-40-15</del>	111-40-15	--	--	--	--	--	--	--	10/4-11/2
Admiralty Cr.	111-41-05	16	--	4	--	20	--	0	11/14
Inlet to Young Lake)									

only one survey

- 1) Surveys covered only portions of each stream.
- 2) Includes tags lost before decoding and marked fish with no tags.



1978 Fish Creek Facility Escapement Surveys (Coho)

<u>Stream</u>	<u>Section Surveyed</u>
Fish Creek	parking lot below bridge to 1 1/4 mile upstream
Outer Pt Creek	1/2 mile above mouth, up to headwaters
Johnson Creek	from road 200 yards upstream and 1/2 mile downstream
Cove Creek	from road down to mouth
"A" Creek	150 yards up from mouth
"B" Creek	100 yards up from mouth
Ninemile Creek	150 yards below the road
Hilda Creek	1/2 mile up south fork, from the mouth 2 mile up north fork
Davies Creek	1/2 mile above and below where road hits the creek
Windfall Creek	200 yard section, 1/4 mile above the lake (in beaver ponds)
Peterson Creek	from main road bridge up to falls
Bay Creek	from mouth to 150 yards above the road
Montana Creek	end of road 1/2 mile upstream
McGinnis Creek	mouth upstream 3/4 mile
Steep Creek	mouth up to falls
Duck Creek	50 yard sections from airport to near Mendenhaven (only fish observed near the airport)
✓ Jordan Creek	Egan Drive culvert upstream to Thunder Mt. Trailer Park
"D" Creek	culvert near Switzer Trailer Park downstream 100 yards
✓ Switzer Creek	old highway bridge upstream to falls
✓ Lemon Creek	old highway bridge upstream 3/4 mile
✓ Vanderbilt Creek	old highway bridge upstream 200 yards
✓ Salmon Creek	Egan Drive up to falls
Admiralty Creek	from lake upstream 1 1/2 mile and lake downstream 1 mile